

## AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently amended) A touch sensitive display comprising:

an active matrix display element having a viewer proximal side and a viewer distal side and comprising a pixel array with rows and columns of pixels; and

a touch sensitive element disposed on the viewer distal side of the active matrix display element, wherein the touch sensitive element comprises:

a first conductive layer comprising a first plurality of conductors;

a second conductive layer comprising a second plurality of conductors; and

a pressure sensitive layer sandwiched between the first conductive layer and the second conductive layer and operable to modify an electrical conductivity between a first conductor of the first plurality of conductors and a second conductor of the second plurality of conductors in response to a pressure point resulting from an applied pressure, characterized in that:

~~the first plurality~~ plurality of conductors are row conductors of the touch sensitive element and the second plurality of conductors are column conductors of the touch sensitive element,

each row of pixels shares a respective row buffer amplifier with a touch sensitive element row conductor, and

each column of pixels shares a respective column buffer amplifier with a touch sensitive element column conductor; and

wherein the respective row buffer amplifier and column buffer amplifier synchronously operate under a time-division multiplexed control to carry out mutually exclusive functions of touch sensing and pixel value setting.

2. (Previously presented) A touch sensitive display as claimed in claim 1 wherein the touch sensitive element comprises a plurality of pressure sensitive elements.

3. (Canceled)

4. (Previously presented) A touch sensitive display as claimed in claim 2 wherein the plurality of pressure sensitive elements is aligned with pixels of the active matrix display element.

5. (Canceled)

6. (Canceled)

7. (Previously presented) A touch sensitive display as claimed in claim 1 wherein the pressure sensitive layer comprises a piezoelectric material operable to modify the electrical conductivity.

8. (Previously presented) A touch sensitive display as claimed in claim 1 wherein the pressure sensitive layer comprises Micro-ElectroMechanical (MEM) switches operable to modify the electrical conductivity.

9. (Previously presented) A touch sensitive display as claimed in claim 1, further comprising detection means operable to determine a position of the pressure point in response to the change in electrical conductivity between the first conductor and the second conductor.

10. (Original) A touch sensitive display as claimed in claim 9 wherein the detection means is operable to detect a plurality of simultaneous pressure points.

11. (Currently amended) A touch sensitive display as claimed in claim 10 wherein the detection means comprise:

a signal source for outputting an electrical signal; and

a sense amplifier for sensing an electrical signal;

wherein the detection means includes a circuit comprising: the signal source, the sense amplifier, the pressure sensitive layer at the pressure point, and on the first conductor and a sense amplifier coupled to the second conductor coupled to one of either the signal source or sense amplifier; and

wherein the circuit of the detection means is arranged to enable the sense amplifier to detect-for-detecting an electrical signal caused by an electrical conductivity being formed between the first conductor and the second conductor in response to the pressure point.

12. (Previously presented) A touch sensitive display as claimed in claim 11 wherein the electrical signal is an electrical charge and the sense amplifier is a charge sensitive amplifier.

13. (Previously presented) A touch sensitive display as claimed in claim 11 further comprising a display controller, wherein the display controller uses the row buffer amplifier to provide a display control signal in a display driver configuration, and wherein the touch sensitive display is further operable to use the row buffer amplifier as a signal source in a pressure point detection configuration.

14. (Previously presented) A touch sensitive display as claimed in claim 11 further comprising a display controller, wherein the display controller uses the column buffer amplifier to provide a display control signal in a display driver configuration, and wherein the touch sensitive display is further operable to use the column buffer amplifier as the sense amplifier in a pressure point detection configuration.

15. (Original) A portable device comprising a touch sensitive display as claimed in claim 1.

16. (New) The touch sensitive display of claim 1 wherein the time-division multiplexed control is carried out via differential switches.

17. (New) The touch sensitive display of claim 1 wherein the time-division multiplexed control is carried out via three differential switches controlled by a configuration signal.

18. (New) The touch sensitive display of claim 1 wherein the time-division multiplexed control is carried out via a set of differential switches comprising:

    a row differential switch coupling the row buffer amplifier to the row electrode,

    a column differential switch coupling the row buffer amplifier to the column electrode,

and

    an input differential switch coupling the column buffer amplifier to a signal corresponding to a desired pixel grey level.

19. (New) A touch sensitive display as claimed in claim 1 wherein at least one of the respective row buffer amplifier and column buffer amplifier operates as a touch sensor signal receiver.

20. (New) A touch sensitive display as claimed in claim 11 wherein the row buffer amplifier is the signal source and the column buffer amplifier is the sense amplifier.

21. (New) A touch sensitive display comprising:

- an active matrix display element having a viewer proximal side and a viewer distal side and comprising a pixel array with rows and columns of pixels; and

- a touch sensitive element disposed on the viewer distal side of the active matrix display element, wherein the touch sensitive element comprises:

- a first conductive layer comprising a first plurality of conductors;

- a second conductive layer comprising a second plurality of conductors; and

- a pressure sensitive layer sandwiched between the first conductive layer and the second conductive layer and operable to modify an electrical conductivity between a first conductor of the first plurality of conductors and a second conductor of the second plurality of conductors in response to a pressure point resulting from an applied pressure, characterized in that:

- the first plurality of conductors are row conductors of the touch sensitive element and the second plurality of conductors are column conductors of the touch sensitive element,

- each row of pixels shares a respective row buffer amplifier with a touch sensitive element row conductor, and

- each column of pixels shares a respective column buffer amplifier with a touch sensitive element column conductor; and

- wherein at least one of the respective row buffer amplifier and column buffer amplifier operates as a touch sensor signal receiver.